U.S. Appl. No.: 10/595,624

Attorney Docket No. LAV0313156

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the

application.

Listing of Claims:

1. (Currently amended): A system for assisting the regeneration of depollution means

associated with oxidation catalyst-forming means, and integrated in an exhaust line of a motor

vehicle diesel engine, and in which the engine is associated with common rail means for feeding

fuel to the cylinders of the engine and adapted, at constant torque, to implement a strategy of

regeneration by injecting fuel into the cylinders in at least one postinjection, the system

comprising:

· detector means for detecting a request for regeneration and thus for postinjection;

· detector means for detecting that the vehicle accelerator pedal is being raised;

· acquisition means for acquiring the temperature downstream from the catalyst-forming

means:

· determination means for determining, on the basis of said temperature, a maximum

duration for applying postinjections during a stage in which the engine is returning to idling as a

result of the accelerator pedal being raised; and

· cutoff means for immediately cutting off-the or each postinjection the postinjections as

soon as the duration of postiniection use has reached the predetermined maximum duration of

application during the stage in which the engine is returning to idling as a result of the accelerator

pedal being raised.

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2. (Currently amended): A system according to claim 1, wherein the depollution means

comprise comprises a particle filter.

3. (Currently amended): A system according to claim 1, wherein the depollution means

comprise-comprises a NOx trap.

4. (Previously presented): A system according to claim 1, wherein the fuel includes an

additive for becoming deposited together with the particles with which it is mixed on the

depollution means in order to facilitate regeneration thereof.

5. (Previously presented): A system according to claim 1, wherein the fuel includes an

additive forming a NOx trap.

6. (Previously presented): A system according to claim 1, wherein the engine is associated

with a turbocharger.

7. (New): A system according to claim 2, wherein the depollution means comprises a NOx

trap.

8. (New): A system according to claim 2, wherein the fuel includes an additive for

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becoming deposited together with the particles with which it is mixed on the depollution means in

order to facilitate regeneration thereof.

9. (New): A system according to claim 3, wherein the fuel includes an additive for

becoming deposited together with the particles with which it is mixed on the depollution means in

order to facilitate regeneration thereof.

10. (New): A system according to claim 7, wherein the fuel includes an additive for

becoming deposited together with the particles with which it is mixed on the depollution means in

order to facilitate regeneration thereof.

11. (New): A method of assisting the regeneration of a depollution device associated with

an oxidation catalyst, and integrated in an exhaust line of a motor vehicle diesel engine, and in

which the engine is associated with a common rail for feeding fuel to the cylinders of the engine

and adapted, at constant torque, to implement a strategy of regeneration by injecting fuel into the

cylinders in at least one postinjection, the method comprising:

· detecting a request for regeneration and thus for postinjection;

· detecting that the vehicle accelerator pedal is being raised;

· acquiring the temperature downstream from the oxidation catalyst;

· determining, on the basis of said temperature, a maximum duration for applying

postiniections during a stage in which the engine is returning to idling as a result of the accelerator

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pedal being raised; and

· immediately cutting off the postinjections as soon as the duration of postinjection use has

reached the predetermined maximum duration of application during this stage in which the engine

is returning to idling as a result of the accelerator pedal being raised.

12. (New): A method according to claim 11, wherein the depollution device comprises a

particle filter.

13. (New): A method according to claim 11, wherein the depollution device comprises a

NOx trap.

14. (New): A method according to claim 11, wherein the fuel includes an additive for

becoming deposited together with the particles with which it is mixed on the depollution device in

order to facilitate regeneration thereof.

15. (New): A method according to claim 11, wherein the fuel includes an additive forming

a NOx trap.

16. (New): A method according to claim 11, wherein the engine is associated with a

turbocharger.

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17. (New): A method according to claim 12, wherein the depollution device comprises a

NOx trap.

18. (New): A method according to claim 12, wherein the fuel includes an additive for

becoming deposited together with the particles with which it is mixed on the depollution device in

order to facilitate regeneration thereof.

19. (New): A method according to claim 13, wherein the fuel includes an additive for

becoming deposited together with the particles with which it is mixed on the depollution device in

order to facilitate regeneration thereof.

20. (New): A method according to claim 17, wherein the fuel includes an additive for

becoming deposited together with the particles with which it is mixed on the depollution device in

order to facilitate regeneration thereof.